

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

Claim 1. (Currently Amended): A water-soluble or water-dispersible polyurethane comprising a reaction product of

- A) a mixture of at least one polyether polyol a1) having an average functionality of ≥ 3 and at least one urethane group-containing polyether polyol a2) having an average functionality of ≥ 4 ,
- B) at least one C₈-C₂₂ monoisocyanate,
- C) at least one (cyclo)aliphatic and/or aromatic diisocyanate,
- D) optionally at least one C₈-C₂₂ monoalcohol, and
- E) optionally at least one polyisocyanate having an average functionality of > 2

wherein component C) comprises isophorone diisocyanate and the starting NCO/OH equivalent ratio is between 0.5:1 to 1.2:1 and the polyurethane has a softening point of from 10°C to 80°C.

Claim 2. (Previously Presented): The polyurethane of Claim 1, wherein the polyether polyol a1) has an average functionality of 3.

Claim 3. (Previously Presented): The polyurethane of Claim 1, wherein the polyether polyol a1) has an average functionality of 4 to 6.

Claim 4. (Previously Presented): The polyurethane of Claim 1, wherein component B) comprises a C₁₀-C₁₈ monoisocyanate.

Claim 5. (Previously Presented): The polyurethane of Claim 1, wherein component B) comprises a C₁₂-C₁₈ monoisocyanate.

Claim 6. (Previously Presented): The polyurethane of Claim 1, wherein component C) comprises a (cyclo)aliphatic diisocyanate.

Claim 7. (Previously Presented): The polyurethane of Claim 1, wherein component D) comprises a C₁₀-C₁₈ monoalcohol.

Claim 8. (Currently Amended): A process for the production of a water-soluble or water-dispersible polyurethane comprising reacting

- A) a mixture of at least one polyether polyol a1) having an average functionality of ≥ 3 and at least one urethane group-containing polyether polyol a2) having an average functionality of ≥ 4 ,
- B) at least one C₈-C₂₂ monoisocyanate,
- C) at least one (cyclo)aliphatic and/or aromatic diisocyanate,
- D) optionally at least one C₈-C₂₂ monoalcohol, and
- E) optionally at least one polyisocyanate having a mean functionality of > 2

wherein component C) comprises isophorone diisocyanate and the starting NCO/OH equivalent ratio is between 0.5:1 to 1.2:1 and the polyurethane has a softening point of from 10°C to 80°C.

Claim 9. (Previously Presented): The process of Claim 8, wherein the urethane group-containing polyether polyol a2) is produced by a partial reaction of the polyether polyol a1) with a diisocyanate.

Claim 10. (Previously Presented): The process of Claim 8, wherein the urethane group-containing polyether polyol a2) is produced by a partial reaction of the polyether polyol a1) with polyisocyanates having an average functionality of ≥ 2 .

Claim 11. (Previously Presented): A composition of matter comprising the polyurethane of Claim 1.

Claim 12. (Previously Presented): The composition of Claim 11, wherein the composition is a thickened aqueous paint system, an adhesive or another aqueous formulation.